Permit Fact Sheet

General Information

Permit Number:	WI-0021776-09-0								
Permittee Name:	City of Green Lake								
Address:	534 MILL STREET								
	P.O. BOX 216	P.O. BOX 216							
City/State/Zip:	GREEN LAKE WI 54	941							
Discharge Location:	Lat 43.85°N, Long 88	3.95°W							
	Green Lake Wastewat 570 Lake Steel Street Green Lake, WI	Green Lake Wastewater Treatment Facility 570 Lake Steel Street							
Receiving Water:	Puchyan River in Gree	en Lake County							
StreamFlow (Q _{7,10}):		Low-flow statistic period	7Q2 (in cfs)	7Q10 (in cfs)					
		Annual	10	4.4					
		Jan	23	12					
		Feb	33	16					
		Mar	50	17					
		Apr	65	19					
		May	71	44					
		Jun	53	26					
		Jul	28	10					
		Aug	21	9.3					
		Sep	16	6.9					
		Oct	14	6.3					
		Nov	16	6.3					
		Dec	18	9.0					
Stream Classification:		fe biological use (warm w non-public water supply	ater sport	fish comn	nunity in the Great Lakes				
Design Flow	Annual Average	0.5 MGD			_				
Significant Industrial Loading?	No	1							
Operator at Proper Grade?	Yes								

Approved	NA
Pretreatment	
Program?	

Facility Description

The treatment system was put into operation during 2008. Raw wastewater first passes through fine screens and grit removal. The heart of the treatment system is 2 rectangular SBR's or 2 ICEAS (Intermittent Cycle Extended Activated Sludge) basins that are operated in parallel. Each basin has pre-react zones that are operated both aerobically and anoxic/anaerobically in conjunction with the rest of the ICEAS basin to promote biological phosphorus removal. A cerium based chemical is added to the ICEAS basins as needed to meet phosphorus limits. The basins have a decant weir that allows discharge during the settling cycle. This effluent passes through UV disinfection prior to discharge to the Puchyan River. Biosolids are aerobically digested and dewatered using a belt press, and the biosolids cake is stored in a covered building. Hauled wastes are accepted and stored in a tank, and then metered into the treatment system for treatment.

	Sample Point Designation						
Sample Point Averaging Period Sample Point Location, WasteType/sample Contents at Treatment Description (as applicable) Sample Point Location, WasteType/sample Contents at Treatment Description (as applicable)							
701	Flow 0.25 MGD, BOD5 135 mg/L, TSS 173 mg/L	Influent - Representative samples shall be collected at the influent pipe.					
001	Flow 0.19 MGD, BOD5 3.2 mg/L, TSS 2.2 mg/L, Phosphorus 0.75 mg/L, Ammonia Nitrogen 0.41 mg/L	Effluent - Representative samples shall be collected from the SBR discharge except that grab samples shall be collected following the disinfection process when applicable.					
003	34 tons (per application)	Cake Sludge - Representative samples of the aerobically digested pressed cake shall be collected from the storage building.					
004		Liquid Sludge - Representative samples of the aerobically digested liquid sludge shall be collected prior to disposal of liquid sludge.					

1 Influent - Proposed Monitoring

Sample Point Number: 701- Influent

Monitoring Requirements and Limitations							
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes		
Flow Rate		MGD	Daily	Continuous			
BOD5, Total		mg/L	2/Week	24-Hr Flow Prop Comp			
Suspended Solids, Total		mg/L	2/Week	24-Hr Flow Prop Comp			

Changes from Previous Permit:

No changes

Explanation of Limits and Monitoring Requirements

Influent monitoring is needed to assess loading to the facility and treatment performance. Requirements for flow, BOD, and TSS are established in accordance with ch. NR 210.04(2), Wis. Adm. Code.

2 Surface Water - Proposed Monitoring and Limitations

Sample Point Number: 001- Effluent

	Monitoring Requirements and Limitations							
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes			
Flow Rate		MGD	Daily	Continuous				
BOD5, Total	Weekly Avg	45 mg/L	2/Week	24-Hr Flow Prop Comp				
BOD5, Total	Monthly Avg	30 mg/L	2/Week	24-Hr Flow Prop Comp				
Suspended Solids, Total	Weekly Avg	45 mg/L	2/Week	24-Hr Flow Prop Comp				
Suspended Solids, Total	Monthly Avg	30 mg/L	2/Week	24-Hr Flow Prop Comp				
Suspended Solids, Total	Weekly Avg	175 lbs/day	2/Week	Calculated				
Suspended Solids, Total	Monthly Avg	118 lbs/day	2/Week	Calculated				
Suspended Solids, Total		lbs/month	Monthly	Calculated	Calculate the Total Monthly Discharge of TSS and report on the last day of the month on the DMR. See TMDL Calculations section in the permit.			
Suspended Solids, Total		lbs/yr	Monthly	Calculated	Calculate the 12-month rolling sum of total monthly mass of TSS discharged and report on the last day of the month on the DMR. See TMDL Calculations section in the permit.			
pH Field	Daily Min	6.0 su	Daily	Grab				
pH Field	Daily Max	9.0 su	Daily	Grab				
Fecal Coliform	Geometric Mean - Monthly	400 #/100 ml	Weekly	Grab	Interim limit effective May through September annually until the final E. coli limit goes into effect			

Monitoring Requirements and Limitations							
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes		
					per the Effluent Limitations for E. coli Schedule.		
E. coli		#/100 ml	Weekly	Grab	Monitoring only May through September annually until the final limit goes into effect per the Effluent Limitations for E. coli Schedule.		
E. coli	Geometric Mean - Monthly	126 #/100 ml	Weekly	Grab	Limit Effective May through September annually per the Effluent Limitations for E. coli Schedule.		
E. coli	% Exceedance	Percent	Monthly	Calculated	Limit Effective May through September annually per the Effluent Limitations for E. coli Schedule. See the E. coli Percent Limit section in the permit. Enter the result in the DMR on the last day of the month.		
Nitrogen, Total Kjeldahl		mg/L	See Listed Qtr(s)	24-Hr Flow Prop Comp	Annual in rotating quarters. See Nitrogen Series Monitoring section below.		
Nitrogen, Nitrite + Nitrate Total		mg/L	See Listed Qtr(s)	24-Hr Flow Prop Comp	Annual in rotating quarters. See Nitrogen Series Monitoring section below.		
Nitrogen, Total		mg/L	See Listed Qtr(s)	Calculated	Annual in rotating quarters. See Nitrogen Series Monitoring section below. Total Nitrogen shall be calculated as the sum of reported values for Total Kjeldahl Nitrogen and Total Nitrite + Nitrate Nitrogen.		
Nitrogen, Ammonia (NH3-N) Total		mg/L	Weekly	24-Hr Flow Prop Comp	Monitoring required October 1, 2023 - September 30, 2024.		
Phosphorus, Total	Monthly Avg	1.0 mg/L	2/Week	24-Hr Flow Prop Comp	This is an interim MDV limit effective through		

Monitoring Requirements and Limitations							
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes		
					September 30, 2023. See the MDV/Phosphorus subsections and phosphorus schedules.		
Phosphorus, Total	Monthly Avg	0.8 mg/L	2/Week	24-Hr Flow Prop Comp	This is an interim MDV limit effective October 1, 2023. See the MDV/Phosphorus subsections and phosphorus schedules.		
Phosphorus, Total		lbs/month	Monthly	Calculated	Calculate the Total Monthly Discharge of phosphorus and report on the last day of the month on the DMR. See TMDL Calculations section in the permit.		
Phosphorus, Total		lbs/yr	Monthly	Calculated	Calculate the 12-month rolling sum of total monthly mass of phosphorus discharged and report on the last day of the month on the DMR. See TMDL Calculations section in the permit.		

Changes from Previous Permit

Total Suspended Solids TMDL Limits- Mass based TSS limits of 175 lbs/day as a weekly average and 118 lbs/day as a monthly average have been added to the permit to comply with requirements of the Upper Fox Wolf River TMDL. Effluent concentration (mg/L) shall be monitored and reported 2 times per week upon permit reissuance and will be used to calculate amounts reported for mass-based limits. An additional reporting requirement for lbs/month will be used to calculate the facility's 12-month rolling sum of total monthly discharge, which can be compared directly to the facility's designated WLA.

Fecal Coliform & E. coli Limits- Fecal coliform monitoring and limits have been replaced with *Escherichia coli* (*E. coli*) monitoring and limits. *E. coli* monitoring is required at the permit effective date. An interim fecal coliform limit of 400 #/100 ml as a monthly geometric mean will apply from the permit effective date to the date indicated in compliance schedule 4.1. At the end of the compliance schedule, *E. coli* limits of 126 #/100 ml as a monthly geometric mean that may never be exceeded and 410 #/100 ml as a daily maximum that may not be exceeded more than 10 percent of the time in any calendar month will apply.

Total Nitrogen Monitoring (TKN, N02+N03 and Total N): Annual monitoring in rotating quarters throughout the permit term was added to the proposed permit.

Phosphorus TMDL Limits- The conditional approval of a multi-discharger variance (MDV) for phosphorus and the imposition of a lower monthly average interim phosphorus limit along with associated compliance schedules to comply with s. 283.16, Wis. Stats. requirements for phosphorus are proposed for this permit. Discharge effluent concentration (mg/L) shall be reported 2 times per week upon permit reissuance and will be used to calculate amounts reported for mass-based parameters. An additional reporting requirement for lbs/month will be used to calculate the facility's 12-month rolling sum of total monthly discharge, which can be compared directly to the facility's designated WLA. Final TMDL WLA-based effluent limits for this facility are 0.869 lbs/day as a six-month average and 2.61 lbs/day as a monthly average.

Explanation of Limits and Monitoring Requirements

Categorical Limits

BOD⁵ and **Total Suspended Solids:** Tracking of BOD⁵ and total suspended solids are required for percent removal requirements found in s. NR 210.05, Wis. Adm. Code and in the standard requirements section of the permit.

Water Quality Based Limits and WET Requirements and Disinfection (if applicable)

Refer to the WQBEL memo for the detailed calculations, prepared by the Water Quality Bureau dated June 26, 2020 used for this reissuance.

Upper Fox Wolf River Total Maximum Daily Load (TMDL): The permitted facility is located within the Upper Fox Wolf River Basin Total Maximum Daily Load (TMDL), which was approved by EPA February 27, 2020. The TMDL establishes Waste Load Allocations (WLAs) for point source dischargers and determines the maximum amounts of phosphorus and total suspended solids that can be discharged and still protect water quality. The final effluent limits and monitoring expressed in the permit were derived from and comply with the applicable water quality criterion and are consistent with the assumptions and requirements of the EPA-approved WLAs in the TMDL, which are 260 lbs/yr for phosphorus and 26,916 lbs/yr for TSS for the permitted facility.

The approved TMDL expresses WLAs as lbs/year and lbs/day (maximum annual load divided by 365 days). As outlined in Section 4.6 of the department's 2020 *TMDL Implementation Guidance for Wastewater Permits*, TMDL limits must be given in the permit that are consistent with the TMDL WLA permit limits derived from TMDL and need to be expressed as specified by 40 CFR 122.45 (d), s. NR 212.76 (4), and s. NR 205.065 (7), Wis. Adm. Code, unless determined to be impracticable. Impracticability has already been determined for phosphorus limits as laid out in the phosphorus impracticability agreement that was approved by USEPA in 2012 (see NPDES MOA Addendum dated July 12, 2012 at https://prodoasint.dnr.wi.gov/swims/downloadDocument.do?id=167886175).

For TSS, continuously discharging municipal facilities covered by the UFWRB TMDL are given monthly average and weekly average mass limits.

Facilities with UFWRB TMDL based effluent limits for phosphorus and TSS must report the 12-month rolling sum of total monthly discharge (lbs/yr). If reported 12-month rolling sums exceed the facility's max annual WLA, the facility's mass limits (monthly average and six-month average) may be recalculated using more appropriate CVs or monitoring frequencies when the permit is reissued to bring discharge levels into compliance with the facility's given WLA.

For this permit term, the permittee has applied for the Multi-Discharger Variance (MDV) for phosphorus as provided for in s. 283.16, Wis. Stats., and approved by USEPA on February 6, 2017 until February 5, 2027. The permittee qualifies for the MDV because it is an existing source and a major facility upgrade is needed to comply with the applicable phosphorus TMDL limits, thereby creating a financial burden. The MDV interim limit for total phosphorus is 0.8 mg/L as a monthly average. As the facility cannot currently meet this limitation, the monthly average limit of 1.0 mg/L will be effective until the 0.8 mg/L monthly average limit becomes effective on 10/01/2023.

Conditions of the MDV require the permittee to report on effluent discharges, submit an action plan to work toward the specified interim limit (0.8 mg/L), and comply with interim limit as indicated in compliance schedule 4.2. Also, the permittee must make annual payments to participating county(s) by March 1 of each year based on the pounds of phosphorus discharged during the previous year in excess of the specified target value. The "price per pound" value is \$54.23 adjusted for CPI annually during the first quarter as defined by s. 283.16(8)(a)2, Wis. Stats.. The participating county(s) uses these payments to implement non-point source (agricultural) phosphorus control strategies at the watershed level.

E coli.: Revisions to bacteria surface water quality criteria to protect recreational uses and accompanying *E. coli* WPDES permit implementation procedures became effective May 1, 2020. The new rule requires that WPDES permits for facilities with required disinfection include monitoring for *E. coli* while facilities are disinfecting during the recreation period and establish effluent limitations for *E. coli* established in s. NR 210.06 (2), Wis. Adm Code. The administrative code rule changes included the following actions: revised the bacteria water quality criteria from fecal coliform to *E. coli* to protect recreation in ch. NR 102, Wis. Adm. Code.; removed fecal coliform criteria for certain individual waters from ch. NR 104, Wis. Adm. Code.; revised permit requirements for publicly and privately owned sewage treatment works in ch. NR 210, Wis. Adm. Code.; and, updated approved analytical methods for bacteria in ch. NR 219, Wis. Adm. Code.

Ammonia

Acute and chronic ammonia toxicity criteria for the protection of aquatic life are included in Tables 2C and 4B of ch. NR 105, Wis. Adm. Code. Subchapter III of ch. NR 106 establishes the procedure for calculating WQBELs for ammonia.

Total Nitrogen Monitoring (NO2+NO3, TKN and Total N): The Department has included effluent monitoring for Total Nitrogen in the permit through the authority under §§ 283.55(1)(e), Wis. Stats., which allows the department to require the permittee to submit information necessary to identify the type and quantity of any pollutants discharged from the point source, and through s. NR 200.065(1)(h), Wis. Adm. Code, which allows for this monitoring to be collected during the permit term. More information on the justification to include total nitrogen monitoring in wastewater permits can be found in the "Guidance for Total Nitrogen Monitoring in Wastewater Permits" dated October 1, 2019. Annual tests are scheduled in the following rotating quarters: January-March 2021, April-June 2022, October-December 2023, July-September 2024, and April-June 2025.

3 Land Application - Proposed Monitoring and Limitations

Sample Point	Sludge Class (A or B)	Sludge Type (Liquid or Cake)	pal Sludge Des Pathogen Reduction Method	Vector Attraction Method	Reuse Option	Amount Reused/Dis posed (Dry Tons/Year)
003	В	Cake	Fecal Coliform	Injection and incorporation	Land applied and hauled	34 dry tons/year
004	В	Liquid	Fecal Coliform	Injection and incorporation	Land Applied	

Is Radium-226 present in the water supply at a level greater than 2 pCi/liter? No

	Municipal Sludge Description							
Sample Point	Sludge Class (A or B)	Sludge Type (Liquid or Cake)	Pathogen Reduction Method	Vector Attraction Method	Reuse Option	Amount Reused/Dis posed (Dry Tons/Year)		

If yes, special monitoring and recycling conditions will be included in the permit to track any potential problems in landapplying sludge from this facility

Is a priority pollutant scan required? No

Priority pollutant scans are required once every 10 years at facilities with design flows between 5 MGD and 40 MGD, and once every 5 years if design flow is greater than 40 MGD.

Sample Point Number: 003- Cake Sludge

	Monitoring Requirements and Limitations							
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes			
Solids, Total		Percent	Annual	Composite				
Arsenic Dry Wt	Ceiling	75 mg/kg	Annual	Composite				
Arsenic Dry Wt	High Quality	41 mg/kg	Annual	Composite				
Cadmium Dry Wt	Ceiling	85 mg/kg	Annual	Composite				
Cadmium Dry Wt	High Quality	39 mg/kg	Annual	Composite				
Copper Dry Wt	Ceiling	4,300 mg/kg	Annual	Composite				
Copper Dry Wt	High Quality	1,500 mg/kg	Annual	Composite				
Lead Dry Wt	Ceiling	840 mg/kg	Annual	Composite				
Lead Dry Wt	High Quality	300 mg/kg	Annual	Composite				
Mercury Dry Wt	Ceiling	57 mg/kg	Annual	Composite				
Mercury Dry Wt	High Quality	17 mg/kg	Annual	Composite				
Molybdenum Dry Wt	Ceiling	75 mg/kg	Annual	Composite				
Nickel Dry Wt	Ceiling	420 mg/kg	Annual	Composite				
Nickel Dry Wt	High Quality	420 mg/kg	Annual	Composite				
Selenium Dry Wt	Ceiling	100 mg/kg	Annual	Composite				
Selenium Dry Wt	High Quality	100 mg/kg	Annual	Composite				
Zinc Dry Wt	Ceiling	7,500 mg/kg	Annual	Composite				
Zinc Dry Wt	High Quality	2,800 mg/kg	Annual	Composite				

Nitrogen, Total Kjeldahl	Percent	Annual	Composite	
Nitrogen, Ammonium (NH4-N) Total	Percent	Annual	Composite	
Phosphorus, Total	Percent	Annual	Composite	
Phosphorus, Water Extractable	% of Tot P	Annual	Composite	
Potassium, Total Recoverable	Percent	Annual	Composite	

Changes from Previous Permit:

PCB monitoring removed.

Explanation of Limits and Monitoring Requirements

PCB monitoring removed. Over the last several permit terms, PCB results have generated nondetectable amounts within the sludge samples therefore using the engineer's best professional judgement, monitoring is no longer required.

Requirements for municipal sludge are determined in accordance with ch. NR 204 Wis. Adm. Code. Ceiling and high quality limits for metals in sludge are specified in ch. NR 204.07(5). Requirements for pathogens are specified in ch. NR 204.07(6) and in ch. NR 204.07 (7) for vector attraction requirements.

Water extractable phosphorus: Water extractable phosphorus (WEP) is the coefficient for determining plant available phosphorus from measured total phosphorus. In Wisconsin, the Penn State Method is utilized and is expressed in percent. While a total P may be significant, the WEP may show that only a small percentage of the P is available to plants because of factors such as treatment processes and chemical addition that "tie-up" phosphorus limiting the amount of phosphorus that is plant available. As part of the Wisconsin's nutrient management plan (NMP) requirements, the accounting of all fertilizers must be included over the NMP cycle. The fertilizer value of the waste needs to be communicated to the famer and accounted for in the NMP.

Sample Point Number: 004- Liquid Sludge

	Monitoring Requirements and Limitations							
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes			
Solids, Total		Percent	Annual	Composite				
Arsenic Dry Wt	Ceiling	75 mg/kg	Annual	Composite				
Arsenic Dry Wt	High Quality	41 mg/kg	Annual	Composite				
Cadmium Dry Wt	Ceiling	85 mg/kg	Annual	Composite				
Cadmium Dry Wt	High Quality	39 mg/kg	Annual	Composite				
Copper Dry Wt	Ceiling	4,300 mg/kg	Annual	Composite				
Copper Dry Wt	High Quality	1,500 mg/kg	Annual	Composite				
Lead Dry Wt	Ceiling	840 mg/kg	Annual	Composite				
Lead Dry Wt	High Quality	300 mg/kg	Annual	Composite				

Monitoring Requirements and Limitations							
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes		
Mercury Dry Wt	Ceiling	57 mg/kg	Annual	Composite			
Mercury Dry Wt	High Quality	17 mg/kg	Annual	Composite			
Molybdenum Dry Wt	Ceiling	75 mg/kg	Annual	Composite			
Nickel Dry Wt	Ceiling	420 mg/kg	Annual	Composite			
Nickel Dry Wt	High Quality	420 mg/kg	Annual	Composite			
Selenium Dry Wt	Ceiling	100 mg/kg	Annual	Composite			
Selenium Dry Wt	High Quality	100 mg/kg	Annual	Composite			
Zinc Dry Wt	Ceiling	7,500 mg/kg	Annual	Composite			
Zinc Dry Wt	High Quality	2,800 mg/kg	Annual	Composite			
Nitrogen, Total Kjeldahl		Percent	Annual	Composite			
Nitrogen, Ammonium (NH4-N) Total		Percent	Annual	Composite			
Phosphorus, Total		Percent	Annual	Composite			
Phosphorus, Water Extractable		% of Tot P	Annual	Composite			
Potassium, Total Recoverable		Percent	Annual	Composite			

Changes from Previous Permit:

Monitoring requirements increased to annually.

Explanation of Limits and Monitoring Requirements

The monitoring frequency is reduced to annual rather than "per occurrence." Annual reporting reduces the number of unnecessary reports generated by the DNR's permitting database.

Requirements for municipal sludge are determined in accordance with ch. NR 204 Wis. Adm. Code. Ceiling and high quality limits for metals in sludge are specified in ch. NR 204.07(5). Requirements for pathogens are specified in ch. NR 204.07(6) and in ch. NR 204.07 (7) for vector attraction requirements. Limitations for PCBs are addressed in ch. NR 204.07(3)(k).

Water extractable phosphorus: Water extractable phosphorus (WEP) is the coefficient for determining plant available phosphorus from measured total phosphorus. In Wisconsin, the Penn State Method is utilized and is expressed in percent. While a total P may be significant, the WEP may show that only a small percentage of the P is available to plants because of factors such as treatment processes and chemical addition that "tie-up" phosphorus limiting the amount of phosphorus that is plant available. As part of the Wisconsin's nutrient management plan (NMP) requirements, the accounting of all fertilizers must be included over the NMP cycle. The fertilizer value of the waste needs to be communicated to the famer and accounted for in the NMP.

4 Compliance Schedules

4.1 Effluent Limitations for E. coli

The permittee shall comply with surface water limitations for E. coli as specified. No later than 14 days following each compliance date, the permittee shall notify the Department in writing of its compliance or noncompliance. If a submittal is required, a timely submittal fulfills the notification

Required Action	
Status Update: The permittee shall submit information within the discharge monitoring report (DMR) comment section documenting the steps taken in preparation for properly monitoring and testing for E. coli including, but not limited to, selected test method and location of sampling.	11/21/2020
Operational Evaluation Report: The permittee shall prepare and submit an Operational Evaluation Report to the Department for review and approval. The report shall include an evaluation of collected effluent data and proposed operational improvements that will optimize efficacy of disinfection at the treatment plant during the period prior to complying with final E. coli limitations and, to the extent possible, enable compliance with the final E. coli limitations. The report shall include a plan and schedule for implementation of the operational improvements. These improvements shall occur as soon as possible, but not later than 4/30/2022. The report shall state whether the operational improvements are expected to result in compliance with the final E. coli limitations.	10/31/2021
The permittee shall implement the operational improvements in accordance with the approved plan and schedule specified in the Operational Evaluation Report and in no case later than 4/30/2022.	
If the Operational Evaluation Report concludes that the operational improvements are expected to result in compliance with the final E. coli limitations, the permittee shall comply with the final E. coli limitations by 4/30/2022 and the permittee is not required to comply with subsequent milestones identified below in this compliance schedule ('Submit Facility Plan', 'Final Plans and Specifications', 'Treatment Plant Upgrade to Meet Limitations', 'Construction Upgrade Progress Report', 'Complete Construction', 'Achieve Compliance').	
FACILITY PLAN - If the Operational Evaluation Report concludes that operational improvements alone are not expected to result in compliance with the final E. coli limitations, the permittee shall initiate development of a facility plan for meeting final E. coli limitations and comply with the remaining required actions in this schedule of compliance.	
If the Department disagrees with the conclusion of the report, and determines that the permittee can achieve final E. coli limitations using the existing treatment system with only operational improvements, the Department may reopen and modify the permit to include an implementation schedule for achieving the final E. coli limitations sooner than 4/30/2025.	
Submit Facility Plan: If the Operational Evaluation Report concluded that the permittee cannot achieve final E. coli limitations with operational improvements alone, the permittee shall submit a Facility Plan per s. NR 110.09, Wis. Adm. Code. The permittee may submit an abbreviated facility plan if the Department determines that the modifications are minor.	04/30/2022
Final Plans and Specifications: The permittee shall submit final construction plans to the Department for approval pursuant to ch. NR 108, Wis. Adm. Code, specifying treatment plant upgrades that must be constructed to achieve compliance with final E. coli limitations and a schedule for completing construction of the upgrades by the complete construction date specified below.	03/31/2023

Treatment Plant Upgrade to Meet Limitations: The permittee shall initiate bidding, procurement, and/or construction of the project. The permittee shall obtain approval of the final construction plans and schedule from the Department pursuant to s. 281.41. Stats., prior to initiating activities defined as construction under ch. NR 108, Wis. Adm. Code. Upon approval of the final construction plans and schedule by the Department pursuant to s. 281.41, Stats., the permittee shall construct the treatment plant upgrades in accordance with the approved plans and specifications.	09/30/2023
Construction Upgrade Progress Report: The permittee shall submit a progress report on construction upgrades.	09/30/2024
Complete Construction: The permittee shall complete construction of wastewater treatment system upgrades.	03/31/2025
Achieve Compliance: The permittee shall achieve compliance with final E. coli limitations.	04/30/2025

4.2 Phosphorus Payment per Pound to County

The permittee is required to make annual payments for phosphorus reductions to the participating county or counties in accordance with s. 283.16(8), Wis. Stats, and the following schedule. The price per pound will be set at the time of permit reissuance and will apply for the duration of the permit.

Required Action	Due Date
Annual Verification of Phosphorus Payment to County: The permittee shall make a total payment to the participating county or counties approved by the Department by March 1 of each calendar year. The amount due is equal to the following: (lbs of phosphorus discharged minus the permittee's target value) times \$54.23 per pound or \$640,000, whichever is less. See the payment calculation steps in the Surface Water section.	03/01/2021
The permittee shall submit Form 3200-151 to the Department by March 1 of each calendar year indicating total amount remitted to the participating counties to verify that the correct payment was made. The first payment verification form is due by the specified Due Date.	
Note: The applicable Target Value is 0.2 mg/L as defined by s. 283.16(1)(h), Wis. Stats. The "per pound" value is \$50.00 adjusted for CPI.	
Annual Verification of Payment #2: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2022
Annual Verification of Payment #3: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2023
Annual Verification of Payment #4: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2024
Annual Verification of Payment #5: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2025
Continued Coverage: If the permittee intends to seek a renewed variance, an application for the MDV (Multi Discharger Variance) shall be submitted as part of the application for permit reissuance in accordance with s. 283.16(4)(b), Wis. Stats.	
Annual Verification of Payment After Permit Expiration: In the event that this permit is not reissued prior to the expiration date, the permittee shall continue to submit Form 3200-151 to the Department indicating total amount remitted to the participating counties by March 1 each year.	

4.3 Phosphorus Schedule - Optimization Plan

The permittee is required to optimize performance to control phosphorus discharges per the following schedule.

Required Action	Due Date
Optimization Plan: The permittee shall prepare an Optimization Plan and submit it for Department approval. The plan shall include an evaluation of collected effluent data, possible source reduction measures and operational improvements to optimize performance to control phosphorus discharges. The plan shall contain a schedule for implementation of the measures and improvements. Once the plan is approved by the Department, the permittee shall take the steps called for in the Optimization Plan and follow the schedule of implementation as approved.	09/30/2021
Progress Report #1: Submit a progress report on optimizing removal of phosphorus.	09/30/2022
Progress Report #2: Submit a progress report on optimizing removal of phosphorus.	09/30/2023
Progress Report #3: Submit a progress report on optimizing removal of phosphorus.	09/30/2024
Progress Report #4: Submit a progress report on optimizing removal of phosphorus.	09/30/2025

4.4 Phosphorus Multi-Discharger Variance Interim Limit (0.8 mg/L)

This compliance schedule requires the permittee to achieve compliance with the specified MDV interim effluent limit in accordance with s. 283.16(6), Wis. Stats., by the due date.

Required Action	
Report on Effluent Discharges: Submit a report on effluent discharges of phosphorus with conclusions regarding compliance.	03/31/2021
Action Plan: Submit an action plan for complying with the specified interim effluent limit. If construction is required, include plans and specifications with the submittal.	
Initiate Actions: Initiate actions identified in the plan.	09/30/2022
Complete Actions: Complete actions identified in the plan and achieve compliance with the specified interim effluent limit.	09/30/2023

Explanation of Compliance Schedules

A compliance schedule is included in the permit to provide time for the permittee to investigate options for meeting new effluent *E. coli* water quality-based effluent limits while coming into compliance with the limits as soon as reasonably possible.

Subsection 283.16(6)(b) Wis. Stats. requires permittees that have received approval for the multi discharger variance to implement a watershed project that is designed to reduce non-point sources of phosphorus within the HUC 8 watershed in which the permittee is located. The permittee has selected the 'payment to the counties' watershed option described in s. 283.16(8), Wis. Stats. Under this option the permittee shall make annual payments to the participating county that is calculated based on the amount of phosphorus actually discharged during a calendar year in pounds per year less the amount of phosphorus that would have been discharged had the permittee discharged phosphorus at a target value concentration of 0.2 mg/L. The pounds of phosphorus discharged in excess of the target value is multiplied by a per pound phosphorus charge that will equal \$54.23 per pound. This schedule requires the permittee to submit form 3200-151 to the department indicating the total amount remitted to the participating county.

The permittee is required to optimize performance to control phosphorus discharges per s. 283.16(6), Wis. Stats throughout the permit term.

Subsection 283.16(6), Wis. Stats., establishes required interim phosphorus effluent limits that must be met for multi-discharger variance (MDV) eligibility. The schedule above provides the permittee with three years to comply with that limit.

Special Reporting Requirements

None

Attachments:

Substantial Compliance Determination, prepared on June 26, 2020 by Mark Stanek, DNR Compliance Engineer Water Quality Based Effluent Limits, prepared on June 26, 2020 by Nicole Krueger, DNR Water Resource Engineer MDV Approval Letter and Checklist, April 8, 2020

Public Notice

Proposed Expiration Date:

September 30, 2025

Justification Of Any Waivers From Permit Application Requirements

None

Prepared By:

Lisa Lumley Wastewater Specialist, Department of Natural Resources

Date: August 6, 2020